

**REMARKS**

In response to the Examiner's Action mailed on March 1, 2006, claims 15-18 are amended.

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An item-by-item response to Examiner's objections or rejections is provided in the followings:

**1. *Election/Restriction***

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The Applicants hereby confirm the response to a Restriction and Election Office Action from the Examiner by withdrawing claims 1 to 14 and 19 to 22 and electing claims 15 to 18 for prosecution.

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**2. *Claim Rejection – 35 USC § 102/§ 103***

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The Examiner rejects claims 15-18 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yu et al., US Patent Number 5,585,623 and further in view of Bernstein et al., US Patent Number 6,458,430.

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In response to the rejections, claims 15-18 are amended. The amended claims clearly distinguish this invention from the photoresist layer as that disclosed by Yu and Bernstein.

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The amended claim 15 is now directed to a **scanning electron microscope (SEM) system** for scanning a photoresist layer disposed on a semiconductor substrate for integrated circuit manufacture that includes:

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a SEM disposed above said photoresist layer for projecting a scanning electronic beam (e-beam) thereto wherein said photoresist layer having an out-gas content less than 0.5 percents thus substantially prevent out-gassing from said photoresist layer during said SEM projecting said e-beam onto said photoresist layer.

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The amended claim 16 is now directed to a **scanning electron microscope (SEM) system** for scanning a photoresist layer disposed on a semiconductor substrate for integrated circuit manufacture that includes:

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a SEM disposed above said photoresist layer for projecting a scanning electronic beam (e-beam) thereto wherein said photoresist layer having an electric resistivity less than 2000 ohm/cm<sup>2</sup> thus substantially prevent an electric charging of said photoresist layer during said SEM projecting said e-beam onto said photoresist layer.

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The amended claim 17 is now directed to a **scanning electron microscope (SEM) system** for scanning a photoresist layer disposed on a semiconductor substrate for integrated circuit manufacture that includes:

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a SEM disposed above said photoresist layer for projecting a scanning electronic beam (e-beam) thereto wherein said photoresist layer having implanted conductive ions for increasing a conductivity of said photoresist layer.

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The amended claim 18 is now directed to a **scanning electron microscope (SEM) system** for scanning a photoresist layer disposed on a semiconductor substrate for integrated circuit manufacture wherein:

said implanted conductive ions further comprising implanted carbon ions.

The amended claims 15 to 18 are totally different and not obvious over the disclosures made by Yu and Bernstein et al. Therefore the Applicants hereby respectfully request that the 35 USC 102 and 103 rejections be withdrawn and the amended claims be allowed.

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For the amendment set forth and the reasons provided above, the Applicants would like to respectfully request that Examiner's objection and rejections be withdrawn. Furthermore, the Applicants respectfully request that the amended Application be allowed and issued as a Patent.

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Respectfully submitted  
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By



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